

Improving Adherence to Public Health Follow-up Care Standards for Underserved Women with Abnormal Cervical Cytology

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Objectives

1. Discuss the impact of cervical cancer in low-income minority women within the U.S. and the state of Alabama.
2. Discuss how patient navigation programs can assist vulnerable population groups to recommended follow-up or diagnostic resolution of abnormal cervical cytology findings.
3. Discuss how PRAPARE guided navigation is used to determine SDOH that could impede the follow-up process in this vulnerable population group.
4. Discuss the results of the QI project that was completed to improve adherence to ADPH follow-up care recommendations in underserved women with abnormal cervical cytology.
5. Discuss ways in which patient navigation efforts can be utilized more effectively within the ADPH and become a standard of care for women who are in need of diagnostic resolution of their abnormal Pap smear.

Background & Statistics

- Cervical cancer disproportionately affects minorities.
- Cervical cancer is a highly preventable disease.
- The failure of women to adhere to recommended follow-up can lead to invasive cervical cancer.
- In 2017, it was estimated that 291,704 women were living with cervical cancer in the U.S.
- This year it is estimated that 14,480 new cases of invasive cervical cancer will be diagnosed and 4,290 will die from cervical cancer.
- African American women have the highest mortality rate of cervical cancer in the U.S. while Hispanic women have the highest incidence of new cases.
- In 2017, 238 new cases of cervical cancer were diagnosed in Alabama and 89 women died from cervical cancer.
- Women from Alabama are dying from cervical cancer at rates higher than all other states in our nation, particularly those who reside in the "black belt" region.
- In the "black belt" region of Alabama, the majority of the population consists of uninsured, low-income minorities and there are a limited number of healthcare providers located in this area.

Traditional Counties of the Alabama Black Belt



Problem Statement

- Underserved females who receive cervical cancer screenings from rural county health departments often fail to adhere to Pap smear follow-up recommendations after an abnormality is found.
- Failure to adhere to these recommendations can increase cervical cancer incidence and mortality rates.



Strategy for Improvement

- One strategy to potentially improve adherence rates to follow-up care standards in this population group is the addition of a patient navigation program into the current abnormal Pap smear follow-up process.
- This evidence-based intervention would allow the patient navigator to identify and respond to SDOH guided by the PRAPARE standardized social risk assessment tool, increasing follow-up adherence rates, decreasing the incidence and mortality rates of cervical cancer, as well as costs related to the treatment of cervical cancer.

PRAPARE

- PROTOCOL FOR RESPONDING TO AND ASSESSING PATIENT'S ASSETS, RISKS, AND EXPERIENCES.
- A national standardized social risk assessment tool developed for use among U.S. community health populations.
- Designed to align with national SDOH initiatives.
- This 21 item survey consists of a set of four national core measures as well as a process for addressing the social determinants at the patient and population level.
- Core Measures: Personal Characteristics, Family & Home, Money & Resources, & Social and Emotional Health.
- Four additional questions: Incarceration status, refugee status, safety, and domestic violence.
- Used to assist providers achieve population health goals while improving health outcomes and reducing costs related to treatment.
- http://www.nachc.org/wp-content/uploads/2018/05/PRAPARE_One_Pager_Sept_2016.pdf

PICOT Question

In women in an underserved public health setting with abnormal cervical cytology, does patient navigation guided by the PRAPARE standardized social risk assessment tool improve adherence with recommended follow-up over three months compared to follow-up without navigation?



Methods

- Show rates for four public health colposcopy clinics (Bibb, Cullman, Dallas, and Shelby) before and after the implementation of PRAPARE-driven navigation were measured and compared.
- Show rates included those appointments kept in the four clinics at three intervals.
 1. Appointments kept under usual follow-up care prior to the COVID-19 pandemic (Pre-COVID).
 2. Appointments kept during the height of the COVID-19 pandemic (COVID).
 3. Appointments kept after the implementation of PRAPARE-driven patient navigation (Post-Implementation).

Implementation

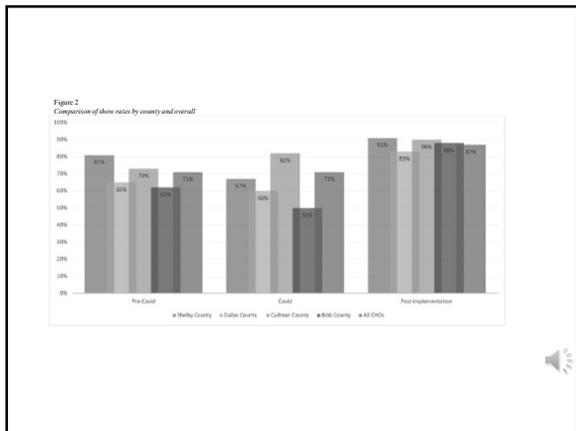
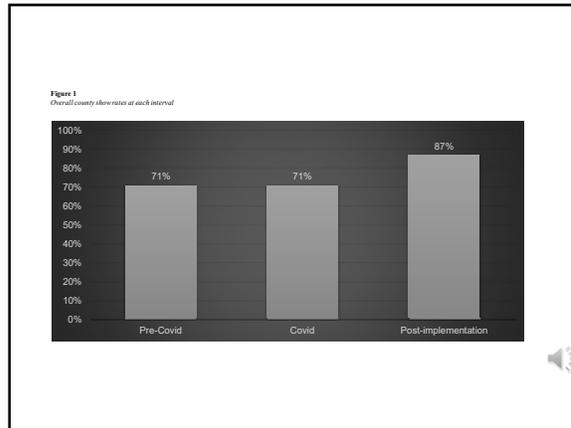
- PRAPARE-guided patient navigation was conducted via phone calls and mail by the primary investigator.
- PRAPARE-guided navigation was administered to underserved women who were scheduled to receive abnormal cervical cytologic follow-up care at the four county colposcopy clinic sites over a three-month period.
- The use of the PRAPARE survey allowed the primary investigator to not only recognize and respond to reported SDOH that may have prevented the patient cohort from adhering to public health follow-up care standards. To recognize and respond to SDOH reported by the women that may have prevented them from adhering to public health follow-up care standards by providing them with community referrals and resources

Results

- Pre-COVID and COVID colposcopy clinic show rates under usual follow-up care were measured and compared to the show rates of the clinics after the implementation of PRAPARE driven patient navigation for each county health department and as an overall total for all four clinics.
- The overall analysis revealed statistical significance for pre-COVID rates versus post implementation rates as well as COVID show rates versus post implementation show rates.
- The results for the individual county health departments were not statistically significant with the exception of Bibb county, at the COVID to post-implementation interval.
- The individual county show rates were however, clinically significant in that there was improvement noted in the percentage of post implementation show rates for each of the four county colposcopy clinics after the implementation of PRAPARE guided navigation.

County	Pre-Covid			Covid			Post-Implementation			Pre-Post		Covid/Post	
	S	K	SA	S	K	SA	S	K	SA	X ²	p	X ²	p
Blk	26	54	67%	8	4	50%	36	14	68%	3.273	0.07000	4	0.0403
Coltan	22	55	73%	28	28	82%	20	18	90%	2.037	0.1565	0.1762	0.687
Dalco	20	53	65%	10	6	60%	23	19	85%	1.7624	0.1868	1.9288	0.1637
Shalby	22	26	81%	9	6	67%	11	10	91%	0.56	0.458207	1.818	0.1753
All counties	100	71	71%	55	39	71%	70	63	87%	6.9823	0.0029	1.0751	0.3043

Table 1
Screened with data analysis
*Non-pf. 95.5% confidence interval, K-Risk, SA-Share rate.



Sample Characteristics

- n=37
- M=35 years of age
- 54% of the women were Black and 46% of them were white
- The reported average annual income was \$11,329.31
- 41% reported obtaining a high school diploma or GED, 38% reported having above a high school education, and 22% reported less than a high school education.
- Medicaid was the primary source of insurance (51%), followed by 30% being uninsured and 19% having private insurance.
- 43% of the women reported being unemployed, 32% of the women worked full-time.
- 92% reported having adequate housing
- 79% reported having transportation, while 22% of them reported that lack of transportation kept them from getting medical and non-medical appointments
- 84% reported that they felt safe in their neighborhoods
- Stress levels ranged from 11% (very much) to 14%(not at all) , with the majority (27%) reporting a little bit or somewhat
- 57% of the women reported having good support systems (talking to family or friends more than 5 times a week)
- Two immediate referrals were made by the primary investigator for reports of depression and domestic violence to community outreach services. The women were also referred to an ACPH Title X CHA who met with them on the day of their appointment at the colposcopy clinics.

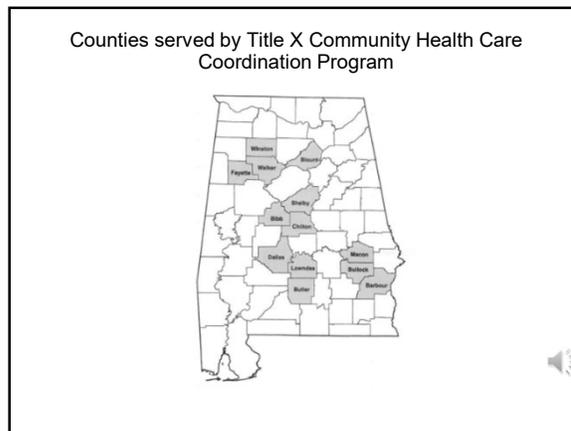
Interpretation/Discussion

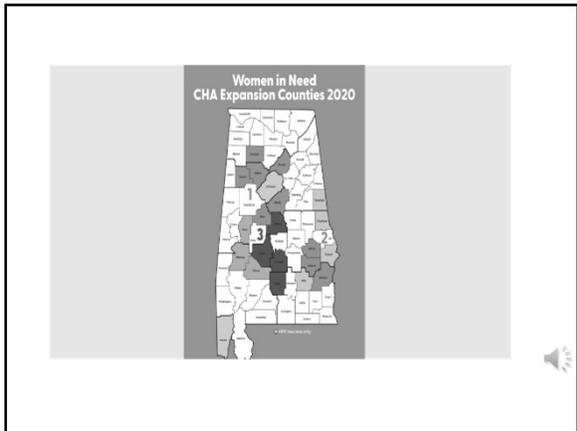
ABCCEDP

- Supports population-based approaches to improve the value of services such as patient navigation which is recognized as an EBI.
- Grantees are in a perfect position to present the findings from this QI project as an EBI in hopes to receive additional funding for navigation services from the CDC and/or it's partners.
- SW position would have to be written into the already existing ABCCEDP protocol. No new staff would need to be hired as this could be accomplished with a change in workflow.

Title X Care Coordination Program

- Already trained and available social workers to assist women in public health get to colposcopy
- Navigation needs to start at the beginning once the patient is placed on the colpo schedule. Referrals must come from the nurses.
- Increase utilization by staff
- Educate the staff
- Expand their availability





Conclusion

Adherence to recommended follow-up was improved in the patient cohort following evidence-based patient navigation. By utilizing a team approach, patient navigation programs in the public health setting have the potential to improve cervical disease outcomes, reduce the incidence and mortality rates of cervical cancer and reduce costs associated with treatment.

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Questions?
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Many Thanks!

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